



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,936	03/12/2001	Paul R Mort III	7275/JB	7249

27752 7590 02/04/2003

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL TECHNICAL CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER

DOUYON, LORNA M

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/786,936	MORT III ET AL. <i>PL</i>
	Examiner	Art Unit
	Lorna M. Douyon	1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 07 November 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-4 and 6-10 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4 and 6-10 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:
 

- 1. Certified copies of the priority documents have been received.
- 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 

- a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

Art Unit: 1751

1. This action is responsive to the amendment filed on November 7, 2002.
2. The cancellation of claim 5 is acknowledged. Claims 1-4, 6-10 are pending.
3. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 10, "the mixing zone" lacks antecedent basis in the claim.
4. Claims 1-4 and 6-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dorset et al. (US Patent No. 5,486,317), hereinafter "Dorset" for the reasons set forth in the office action in paper number 4.
5. Claims 1-4, 7-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sikra et al. (WO 97/32954), hereinafter "Sikra" for the reasons set forth in the office action in paper number 4.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1751

7. Claims 1, 3-4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akkermans et al. (US Patent No. 6,274,544).

Akkermans teaches a process for the production of a granular detergent product comprising spraying droplets of a liquid binder to contact a particulate solid starting material in a low-shear granulator wherein the  $d_{3,2}$  average droplet diameter of the liquid binder is not greater than 10 times, preferably not greater than 2 times and most preferably not greater than the  $d_{3,2}$  average particle diameter of that fraction of the total solid starting material which has a  $d_{3,2}$  particle diameter of from 20  $\mu\text{m}$  to 200  $\mu\text{m}$  (see col. 1, line 63 to col. 2, line 14). The low-shear granulator can be a rotating drum or bowl mixer/granulator (see col. 3, lines 54-59). The liquid binder comprises an acid precursor of an anionic surfactant such as an acid precursor of a linear alkylbenzene sulphonate (LAS) or primary alkyl sulphate (PAS) and the solid starting material comprises an inorganic alkaline material such as sodium carbonate (see col. 4, lines 13-23). Sometimes it will be desirable not to incorporate all of such anionic by neutralization of an acid precursor, some can optionally be incorporated in the alkali metal salt form, dissolved in the liquid binder (see col. 4, lines 51-61). In a refinement of the process, the solid starting material may be contacted and mixed with a first portion of the liquid binder in a low, moderate or high-shear mixer (i.e. a premixer) to form a partially granulated material and the latter can be sprayed with a second portion of the liquid binder in the low-shear granulator to form the granulated detergent product (see col. 5, lines 24-30). The total amount of detergency builder in the granulation product is suitably from 5 to 95% by weight (see col. 6, lines 58-61). The use of a premixer

Art Unit: 1751

enables the final bulk density to be 350-750 g/l or 550-1300 g/l having particle size ranges wherein not more than 10% by weight have a diameter >1.4 mm (see col. 7, lines 58-67).

Akkermans also teaches that the present invention not only provides control of particle size and bulk density in the final product, it also avoids production of irregular-shaped particles (see col. 3, lines 47-53). Akkermans, however, fails to specifically disclose (1) a moderate speed mixer, (2) the size of the binder and (3) the geometric standard deviation of the granular product.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the low-shear granulator of Akkermans to be equivalent to the moderate speed mixer because there is no clear explanation of what a moderate speed mixer is, in the present claim 1.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the size of the binder for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to difference (3), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the geometric standard deviation of

Art Unit: 1751

the granular product to be within those recited not only because the products have overlapping bulk density and particle sizes but also because Akkermans teaches that the process avoids production of irregular-shaped particles.

***Response to Applicants' Arguments***

8. Applicants' arguments filed November 7, 2002 have been fully considered but they are not persuasive.

With respect to Dorset or Sikra, Applicants argue that neither Dorset or Sikra teaches or suggests the formation of a detergent agglomerate wherein the agglomeration binder in the form of discrete mass units within the defined size range.

The Examiner respectfully disagrees with the above argument because even though Dorset or Sikra does not explicitly disclose the size range of the binder added to the moderate speed mixer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the liquid stream or binder added to the moderate speed mixer of Dorset or Sikra to have a particle size within those recited because similar process steps with the same moderate speed mixers (i.e., Lodige KM mixer) have been utilized. Applicants have not provided any evidence showing that Applicants' binder in the moderate speed mixer is unexpectedly better than those of the prior art.

Art Unit: 1751

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (703) 305-3773. The examiner can normally be reached on Mondays-Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Technology Center is:

(703) 872-9311 - for Official After Final faxes  
(703) 872-9310- for all other Official faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.

January 27, 2003

*Lorna M. Douyon*

Lorna M. Douyon  
Primary Examiner  
Art Unit 1751